

3 RECEIVED
APR 25 2001 1642
TECH CENTER 1600/2900

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/756,301A

DATE: 04/13/2001

TIME: 13:05:48

Input Set : A:\0975.1005-008SEQLIST.txt

Output Set: N:\CRF3\04122001\I756301A.raw

ENTERED

```

4 <110> APPLICANT: Le, Junming
5   Vilcek, Jan
6   Daddona, Peter
7   Ghrayeb, John
8   Knight, David M.
9   Siegel, Scott
11 <120> TITLE OF INVENTION: Anti-TNF Antibodies and Peptides of
12   Human Tumor Necrosis Factor
15 <130> FILE REFERENCE: 0975.1005-008
17 <140> CURRENT APPLICATION NUMBER: US 09/756,301A
18 <141> CURRENT FILING DATE: 2001-01-08
20 <150> PRIOR APPLICATION NUMBER: U.S. 09/133,119
21 <151> PRIOR FILING DATE: 1998-08-12
23 <150> PRIOR APPLICATION NUMBER: U.S. 08/570,674
24 <151> PRIOR FILING DATE: 1995-12-11
26 <150> PRIOR APPLICATION NUMBER: U.S. 08/324,799
27 <151> PRIOR FILING DATE: 1994-10-18
29 <150> PRIOR APPLICATION NUMBER: U.S. 08/192,102
30 <151> PRIOR FILING DATE: 1994-02-04
32 <150> PRIOR APPLICATION NUMBER: U.S. 08/192,861
33 <151> PRIOR FILING DATE: 1994-02-04
35 <150> PRIOR APPLICATION NUMBER: U.S. 08/192,093
36 <151> PRIOR FILING DATE: 1994-02-04
38 <150> PRIOR APPLICATION NUMBER: U.S. 08/010,406
39 <151> PRIOR FILING DATE: 1993-01-29
41 <150> PRIOR APPLICATION NUMBER: U.S. 08/013,413
42 <151> PRIOR FILING DATE: 1993-02-02
44 <150> PRIOR APPLICATION NUMBER: U.S. 07/943,852
45 <151> PRIOR FILING DATE: 1992-09-11
47 <150> PRIOR APPLICATION NUMBER: U.S. 07/853,606
48 <151> PRIOR FILING DATE: 1992-03-18
50 <150> PRIOR APPLICATION NUMBER: U.S. 07/670,827
51 <151> PRIOR FILING DATE: 1991-03-18
54 <160> NUMBER OF SEQ ID NOS: 19
56 <170> SOFTWARE: FastSEQ for Windows Version 4.0
58 <210> SEQ ID NO: 1
59 <211> LENGTH: 157
60 <212> TYPE: PRT
61 <213> ORGANISM: Homo sapiens
63 <400> SEQUENCE: 1
64 Val Arg Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala His Val
65 1      5      10      15
66 Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg
67      20      25      30
68 Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu
69      35      40      45
70 Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe

```

RAW SEQUENCE LISTING

DATE: 04/13/2001

PATENT APPLICATION: US/09/756,301A

TIME: 13:05:48

Input Set : A:\0975.1005-008SEQLIST.txt

Output Set: N:\CRF3\04122001\I756301A.raw

```

71      50      55      60
72 Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu Leu Thr His Thr Ile
73 65      70      75      80
74 Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala
75      85      90      95
76 Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys
77      100      105      110
78 Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys
79      115      120      125
80 Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr Leu Asp Phe
81      130      135      140
82 Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu
83 145      150      155
86 <210> SEQ ID NO: 2
87 <211> LENGTH: 321
88 <212> TYPE: DNA
89 <213> ORGANISM: Mus Balb/c
91 <220> FEATURE:
92 <221> NAME/KEY: CDS
93 <222> LOCATION: (1)...(321)
95 <400> SEQUENCE: 2
96 gac atc ttg ctg act cag tct cca gcc atc ctg tct gtg agt cca gga 48
97 Asp Ile Leu Leu Thr Gln Ser Pro Ala Ile Leu Ser Val Ser Pro Gly
98 1 5 10 15
100 gaa aga gtc agt ttc tcc tgc agg gcc agt cag ttc gtt ggc tca agc 96
101 Glu Arg Val Ser Phe Ser Cys Arg Ala Ser Gln Phe Val Gly Ser Ser
102 20 25 30
104 atc cac tgg tat cag caa aga aca aat ggt tct cca agg ctt ctc ata 144
105 Ile His Trp Tyr Gln Gln Arg Thr Asn Gly Ser Pro Arg Leu Leu Ile
106 35 40 45
108 aag tat gct tct gag tct atg tct ggg atc cct tcc agg ttt agt ggc 192
109 Lys Tyr Ala Ser Glu Ser Met Ser Gly Ile Pro Ser Arg Phe Ser Gly
110 50 55 60
112 agt gga tca ggg aca gat ttt act ctt agc atc aac act gtg gag tct 240
113 Ser Gly Ser Gly Thr Asp Phe Thr Leu Ser Ile Asn Thr Val Glu Ser
114 65 70 75 80
116 gaa gat att gca gat tat tac tgt caa caa agt cat agc tgg cca ttc 288
117 Glu Asp Ile Ala Asp Tyr Tyr Cys Gln Gln Ser His Ser Trp Pro Phe
118 85 90 95
120 acg ttc ggc tcg ggg aca aat ttg gaa gta aaa 321
121 Thr Phe Gly Ser Gly Thr Asn Leu Glu Val Lys
122 100 105
125 <210> SEQ ID NO: 3
126 <211> LENGTH: 107
127 <212> TYPE: PRT
128 <213> ORGANISM: Mus Balb/c
130 <400> SEQUENCE: 3
131 Asp Ile Leu Leu Thr Gln Ser Pro Ala Ile Leu Ser Val Ser Pro Gly
132 1 5 10 15

```

RAW SEQUENCE LISTING

DATE: 04/13/2001

PATENT APPLICATION: US/09/756,301A

TIME: 13:05:48

Input Set : A:\0975.1005-008SEQLIST.txt

Output Set: N:\CRF3\04122001\I756301A.raw

```

133 Glu Arg Val Ser Phe Ser Cys Arg Ala Ser Gln Phe Val Gly Ser Ser
134          20          25          30
135 Ile His Trp Tyr Gln Gln Arg Thr Asn Gly Ser Pro Arg Leu Leu Ile
136          35          40          45
137 Lys Tyr Ala Ser Glu Ser Met Ser Gly Ile Pro Ser Arg Phe Ser Gly
138          50          55          60
139 Ser Gly Ser Gly Thr Asp Phe Thr Leu Ser Ile Asn Thr Val Glu Ser
140 65          70          75          80
141 Glu Asp Ile Ala Asp Tyr Tyr Cys Gln Gln Ser His Ser Trp Pro Phe
142          85          90          95
143 Thr Phe Gly Ser Gly Thr Asn Leu Glu Val Lys
144          100          105
147 <210> SEQ ID NO: 4
148 <211> LENGTH: 357
149 <212> TYPE: DNA
150 <213> ORGANISM: Mus Balb/c
152 <220> FEATURE:
153 <221> NAME/KEY: CDS
154 <222> LOCATION: (1)...(357)
156 <400> SEQUENCE: 4
157 gaa gtg aag ctt gag gag tct gga gga ggc ttg gtg caa cct gga gga 48
158 Glu Val Lys Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
159 1          5          10          15
161 tcc atg aaa ctc tcc tgt gtt gcc tct gga ttc att ttc agt aac cac 96
162 Ser Met Lys Leu Ser Cys Val Ala Ser Gly Phe Ile Phe Ser Asn His
163          20          25          30
165 tgg atg aac tgg gtc cgc cag tct cca gag aag ggg ctt gag tgg gtt 144
166 Trp Met Asn Trp Val Arg Gln Ser Pro Glu Lys Gly Leu Glu Trp Val
167          35          40          45
169 gct gaa att aga tca aaa tct att aat tct gca aca cat tat gcg gag 192
170 Ala Glu Ile Arg Ser Lys Ser Ile Asn Ser Ala Thr His Tyr Ala Glu
171          50          55          60
173 tct gtg aaa ggg agg ttc acc atc tca aga gat gat tcc aaa agt gct 240
174 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ala
175 65          70          75          80
178 gtc tac ctg caa atg acc gac tta aga act gaa gac act ggc gtt tat 288
179 Val Tyr Leu Gln Met Thr Asp Leu Arg Thr Glu Asp Thr Gly Val Tyr
180          85          90          95
182 tac tgt tcc agg aat tac tac ggt agt acc tac gac tac tgg ggc caa 336
183 Tyr Cys Ser Arg Asn Tyr Tyr Gly Ser Thr Tyr Asp Tyr Trp Gly Gln
184          100          105          110
186 ggc acc act ctc aca gtc tcc 357
187 Gly Thr Thr Leu Thr Val Ser
188          115
191 <210> SEQ ID NO: 5
192 <211> LENGTH: 119
193 <212> TYPE: PRT
194 <213> ORGANISM: Mus Balb/c
196 <400> SEQUENCE: 5

```

RAW SEQUENCE LISTING DATE: 04/13/2001
 PATENT APPLICATION: US/09/756,301A TIME: 13:05:48

Input Set : A:\0975.1005-008SEQLIST.txt
 Output Set: N:\CRF3\04122001\I756301A.raw

```

197 Glu Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
198 1          5          10          15
199 Ser Met Lys Leu Ser Cys Val Ala Ser Gly Phe Ile Phe Ser Asn His
200          20          25          30
201 Trp Met Asn Trp Val Arg Gln Ser Pro Glu Lys Gly Leu Glu Trp Val
202          35          40          45
203 Ala Glu Ile Arg Ser Lys Ser Ile Asn Ser Ala Thr His Tyr Ala Glu
204          50          55          60
205 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ala
206 65          70          75          80
207 Val Tyr Leu Gln Met Thr Asp Leu Arg Thr Glu Asp Thr Gly Val Tyr
208          85          90          95
209 Tyr Cys Ser Arg Asn Tyr Tyr Gly Ser Thr Tyr Asp Tyr Trp Gly Gln
210          100         105         110
211 Gly Thr Thr Leu Thr Val Ser
212          115
215 <210> SEQ ID NO: 6
216 <211> LENGTH: 8
217 <212> TYPE: PRT
218 <213> ORGANISM: Homo sapiens
220 <400> SEQUENCE: 6
221 Gly Thr Leu Val Thr Val Ser Ser
222 1          5
225 <210> SEQ ID NO: 7
226 <211> LENGTH: 7
227 <212> TYPE: PRT
228 <213> ORGANISM: Homo sapiens
230 <400> SEQUENCE: 7
231 Gly Thr Lys Leu Glu Ile Lys
232 1          5
235 <210> SEQ ID NO: 8
236 <211> LENGTH: 20
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: PCR oligonucleotides
244 <400> SEQUENCE: 8
245 cctggatacc tgtgaaaaga
247 <210> SEQ ID NO: 9
248 <211> LENGTH: 27
249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: PCR oligonucleotides
256 <400> SEQUENCE: 9
257 cctggtacct tagtcaccgt ctctca
259 <210> SEQ ID NO: 10
260 <211> LENGTH: 27
261 <212> TYPE: DNA

```

20

27

RAW SEQUENCE LISTING DATE: 04/13/2001
 PATENT APPLICATION: US/09/756,301A TIME: 13:05:48

Input Set : A:\0975.1005-008SEQLIST.txt
 Output Set: N:\CRF3\04122001\I756301A.raw

```

262 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
265 <223> OTHER INFORMATION: PCR oligonucleotides
268 <400> SEQUENCE: 10
269 aatagatatc tccttcaaca cctgcaa                27
271 <210> SEQ ID NO: 11
272 <211> LENGTH: 21
273 <212> TYPE: DNA
274 <213> ORGANISM: Artificial Sequence
276 <220> FEATURE:
277 <223> OTHER INFORMATION: PCR oligonucleotides
280 <400> SEQUENCE: 11
281 atcgggacaa agttggaaat a                      21
283 <210> SEQ ID NO: 12
284 <211> LENGTH: 16
285 <212> TYPE: DNA
286 <213> ORGANISM: Artificial Sequence
288 <220> FEATURE:
289 <223> OTHER INFORMATION: PCR oligonucleotides
292 <400> SEQUENCE: 12
293 ggcgggtctgg taccgg                          16
295 <210> SEQ ID NO: 13
296 <211> LENGTH: 19
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: PCR oligonucleotides
304 <400> SEQUENCE: 13
305 gtcaacaaca tagtcatca                        19
307 <210> SEQ ID NO: 14
308 <211> LENGTH: 23
309 <212> TYPE: DNA
310 <213> ORGANISM: Artificial Sequence
312 <220> FEATURE:
313 <223> OTHER INFORMATION: PCR oligonucleotides
316 <400> SEQUENCE: 14
317 cacaggtgtg tccccaagga aaa                  23
319 <210> SEQ ID NO: 15
320 <211> LENGTH: 18
321 <212> TYPE: DNA
322 <213> ORGANISM: Artificial Sequence
324 <220> FEATURE:
325 <223> OTHER INFORMATION: PCR oligonucleotides
329 <400> SEQUENCE: 15
330 aatctggggt aggcacaa                        18
332 <210> SEQ ID NO: 16
333 <211> LENGTH: 17
334 <212> TYPE: DNA
335 <213> ORGANISM: Artificial Sequence

```

VERIFICATION SUMMARY DATE: 04/13/2001
PATENT APPLICATION: US/09/756,301A TIME: 13:05:49

Input Set : A:\0975.1005-008SEQLIST.txt
Output Set: N:\CRF3\04122001\I756301A.raw